# EVALUATION REPORT VERIZON WIRELESS, INC. APPLICATION #6411 PLANT #14691

### **BACKGROUND**

Verizon Wireless, Inc. is applying for an A/C & P/O for the following equipment:

S-2 Emergency Diesel Generator, Caterpillar 3508B, 1502 BHP

### **EMISSION CALCULATIONS**

#### Basis:

- 1. Emission calculation is based on emission factors provided by the manufacturer.
- 2. Reliability-related activities are limited to 100 hr/yr.

	HC	NOx	CO	PM	SO2
g/BHP-hr	0.22	6.90	0.51	0.15	0.13
Annual Average Daily Emissions (lb/day)	0.20	6.25	0.46	0.14	0.12
Maximum Operating Daily Emissions (lb/day)	17.45	547.21	40.45	11.90	10.44
Plant Cumulative Increase (ton/yr)	0.04	1.14	80.0	0.02	0.02

### PLANT CUMULATIVE INCREASE

Plant cumulative increases are 0.04 ton/yr HC, 1.14 ton/yr NOX, 0.08 ton/yr CO, 0.02 ton/yr PM and 0.22 ton/yr SO2.

### **RISK SCREEN ANALYSIS**

Risk screen analysis was performed on diesel exhaust particulate matter emissions. The risk will not exceed 10 in a million (TBACT level) for 100 hours reliability-related activities.

## **BACT DETERMINATION**

This application is likely to trigger BACT since emissions of criteria pollutants are greater than 10 lb/day potentially. However, BACT's are met because emission factors of all criteria pollutants are same as or below those required by BACT. Also, the proposed source meets TBACT in regard to PM emissions.

### OFFSET REQUIREMENT

This application does not require offset.

### **COMPLIANCE DETERMINATION**

Per Reg-9-8-110, the proposed generator is exempt from the requirements of Sections 301, 302 and 502 of Reg 9-8. The proposed generator is expected to operate in compliance with Reg 9-8-330 (Emergency Standby Engines, Hours of Operation).

This source triggers BACT. However, BACT is satisfied.

NSPS rules and NESHAPS requirements are not applicable.

This project is considered to be ministerial. The CEQA Checklist is checked and attached.

#### CONDITIONS

- S-2 Emergency Diesel Generator, Caterpillar 3508B, 1502 BHP
  - 1. The Emergency Diesel Generator (S-2) shall be limited to 100 hours per year of operation for the purpose of maintenance and testing. (Basis: Toxic Risk Management and Regulation 9-8-330)
  - 2. Only low sulfur fuel (<0.5% sulfur by weight) shall be combusted at S-2. The maximum sulfur content of the fuel shall be demonstrated by vendor certification. (Basis: Regulation 9-1-304)
  - 3. In order to demonstrate compliance with the above requirements, the operator of S-2 shall keep the following records in a District approved log. These records shall be updated on at least a monthly basis, kept on-site, and be available for District inspection for at least 5 years from the date on which a record was made. (Basis: Toxic Risk Management, Regulation 9-1-304)
    - a. operating hours for S-2
    - b. vendor certified fuel sulfur content

### RECOMMENDATION

I recommend a conditional P/O be issued to Verizon Wireless, Inc. for the following equipment:

S-2 Emergency Diesel Generator, Caterpillar 3508B, 1502 BHP

### **EXEMPTION**

None.

Hon-ting Man Air Quality Engineer II December 3, 2002